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CYP2S1 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP12635b

Specification

CYP2S1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q96SQ9

CYP2S1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 29785

Other Names
Cytochrome P450 2S1, CYPIIS1, CYP2S1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CYP2S1 Antibody (C-term) Blocking peptide - Protein Information

Name CYP2S1 {ECO:0000303|PubMed:11181079, ECO:0000312|HGNC:HGNC:15654}

Function
A cytochrome P450 monooxygenase involved in the metabolism of retinoids and eicosanoids (PubMed:12711469, PubMed:21068195). In epidermis, may contribute to the oxidative metabolism of all-trans- retinoic acid. For this activity, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed:12711469). Additionally, displays peroxidase and isomerase activities toward various oxygenated eicosanoids such as prostaglandin H2 (PGH2) and hydroperoxyeicosatetraenoates (HPETEs) (PubMed:21068195). Independently of cytochrome P450 reductase, NADPH, and O2, catalyzes the breakdown of PGH2 to hydroxyheptadecatrienoic acid (HHT) and malondialdehyde (MDA), which is known to act as a mediator of DNA damage (PubMed:21068195).

Cellular Location
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane;

Peripheral membrane protein

Tissue Location
Expressed at higher levels in extrahepatic tissues including trachea, lung, stomach, small intestine, colon, kidney, breast, placenta and spleen (PubMed:11181079, PubMed:12711469) Expressed in peripheral blood leukocytes (PubMed:11181079) Constitutively expressed in skin (at protein level) (PubMed:12711469)

CYP2S1 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CYP2S1 Antibody (C-term) Blocking peptide - Images

CYP2S1 Antibody (C-term) Blocking peptide - Background

This gene encodes a member of the cytochrome P450superfamily of enzymes. The cytochrome P450 proteins aremonooxygenases which catalyze many reactions involved in drugmetabolism and synthesis of cholesterol, steroids and other lipids.This protein localizes to the endoplasmic reticulum. In rodents,the homologous protein has been shown to metabolize certaincarcinogens; however, the specific function of the human proteinhas not been determined.

CYP2S1 Antibody (C-term) Blocking peptide - References

Bui, P.H., et al. Mol. Pharmacol. 76(5):1031-1043(2009)Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)Deb, S., et al. Expert Opin Drug Metab Toxicol 5(4):367-380(2009)Jang, Y.J., et al. Ther Drug Monit 29(3):292-298(2007)Hanzawa, Y., et al. Drug Metab. Pharmacokinet. 22(2):136-140(2007)